East Building, PHH-23 1200 New Jersey Avenue Southeast Washington, D.C. 20590 IAEA CERTIFICATE OF COMPETENT AUTHORITY

## SPECIAL FORM RADIOACTIVE MATERIALS CERTIFICATE USA/0018/S-96, REVISION 10

This certifies that the source described has been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency<sup>1</sup> and the United States of America<sup>2</sup> for the transport of radioactive material.

- Source Identification SR-Cf-100 Series neutron source manufactured 1. by either the Savannah River Laboratory or the Oak Ridge National Laboratory.
- Source Description Cylindrical seal welded double encapsulation with the inner encapsulation made of a platinum-rhodium alloy and the outer encapsulation made of Type 304L stainless steel or Zircalloy-2. Approximate outer dimensions are 9.4 mm (0.37 in.) in diameter and 38.1 mm (1.5 in.) in overall length. Construction shall be in accordance with attached Drawing No. USA/0018/S.
- 3. Radioactive Contents - No more than 0.192 TBq (5.2 Ci) Californium-252. The Cf-252 is in the form of an oxide.
- <u>Quality Assurance</u> Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors in the United States exporting shipments under this certificate shall satisfy the applicable requirements of Subpart H of 10 CFR 71.
- 5. Expiration Date - This certificate expires on July 31, 2020.

<sup>1 &</sup>quot;Regulations for the Safe Transport of Radioactive Material, 1996 TS-R-1 (ST-1, Revised), " published by (Revised), No. International Atomic Energy Agency(IAEA), Vienna, Austria.

<sup>&</sup>lt;sup>2</sup> Title 49, Code of Federal Regulations, Parts 100-199, United States of America.

## CERTIFICATE USA/0018/S-96, REVISION 10

This certificate is issued in accordance with paragraph 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the July 28, 2015 petition by Department of Energy, Washington, DC, and in consideration of other information on file in this Office.

Certified By:

Dr. Magdy El-Sibaie

Associate Administrator for Hazardous Materials Safety

Revision 10 - Issued to extend the expiration date.

Jul 30 2015

(DATE)

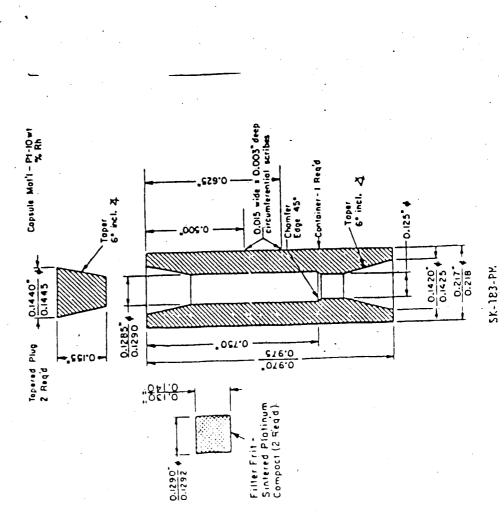
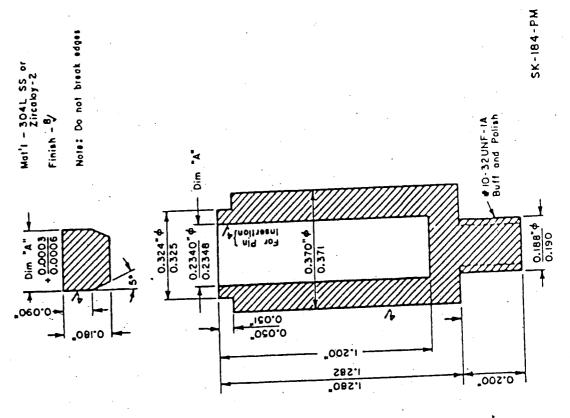


FIGURE 2. SR-CF 100 Series - Inner Capsule Components



FICHRE 4. SRCL100 SERIES - SECONDARY CAPSULE



U.S. Department of Transportation

East Building, PHH-23 1200 New Jersey Avenue SE Washington, D.C. 20590

Pipeline and Hazardous Materials Safety Administration

CERTIFICATE NUMBER: USA/0018/S-96, Revision 10

## **ORIGINAL REGISTRANT(S):**

Dr. James M. Shuler Manager, Packaging Certification Program Department of Energy U.S. Department of Energy 1000 Independence Ave, SW EM-60 Washington, DC 20585

## **REGISTERED USER(S):**

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